

2019 Chronic Wasting Disease Update



LIVE LIFE
OUTSIDE

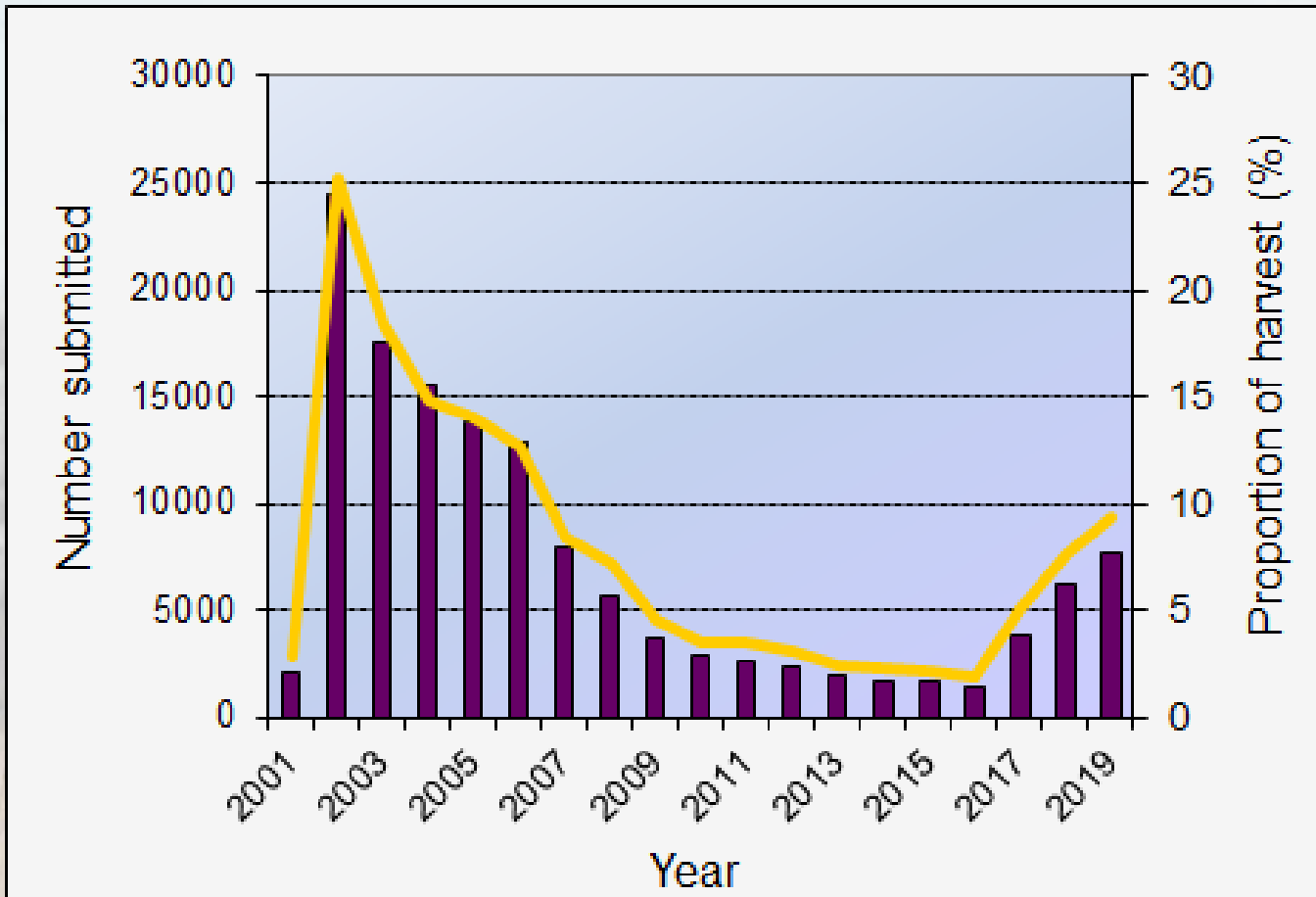
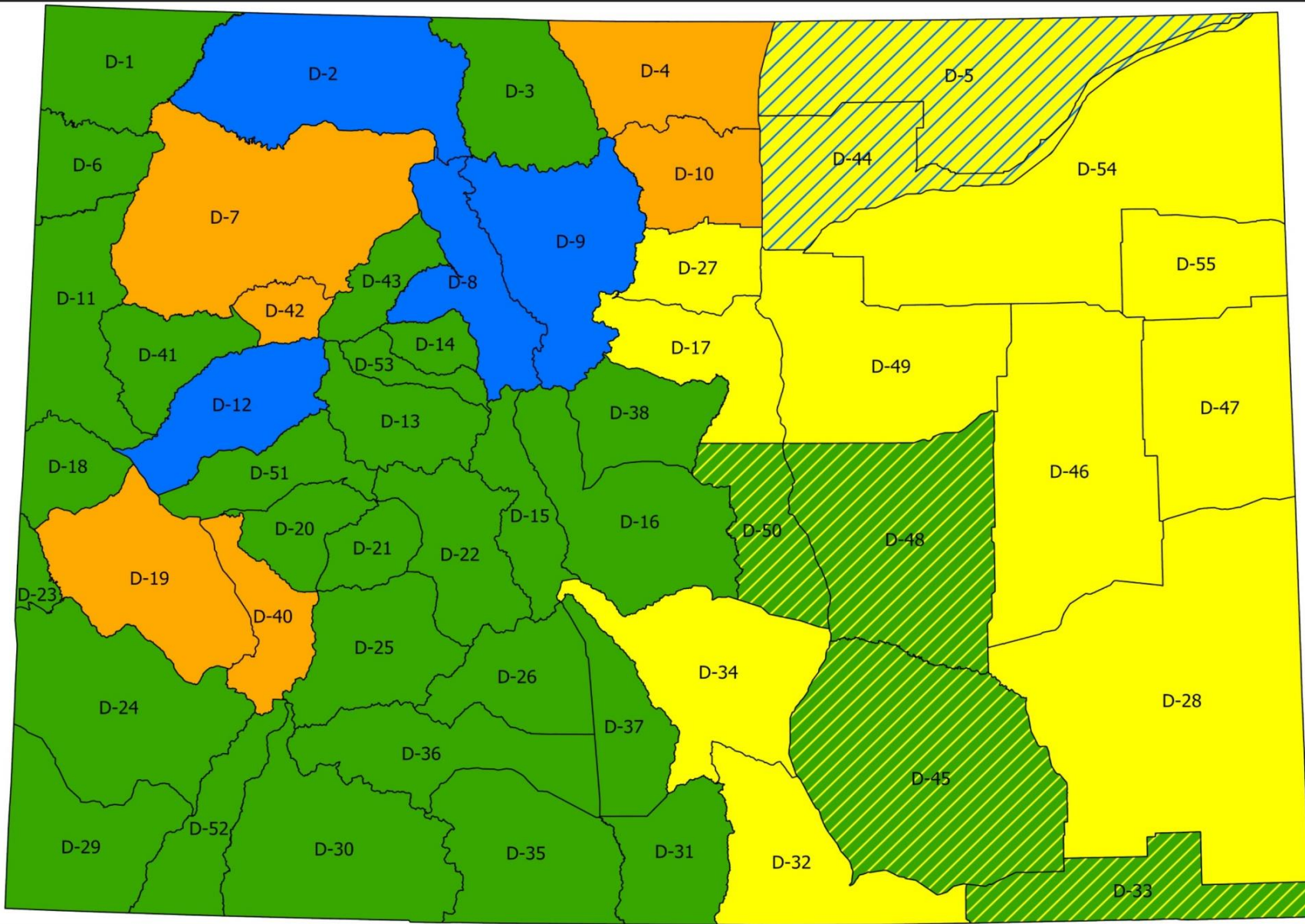


Figure. Colorado deer & elk chronic wasting disease (CWD) testing submission trends.



LIVE LIFE
OUTSIDE



CWD Mandatory Testing Year for Deer DAUs



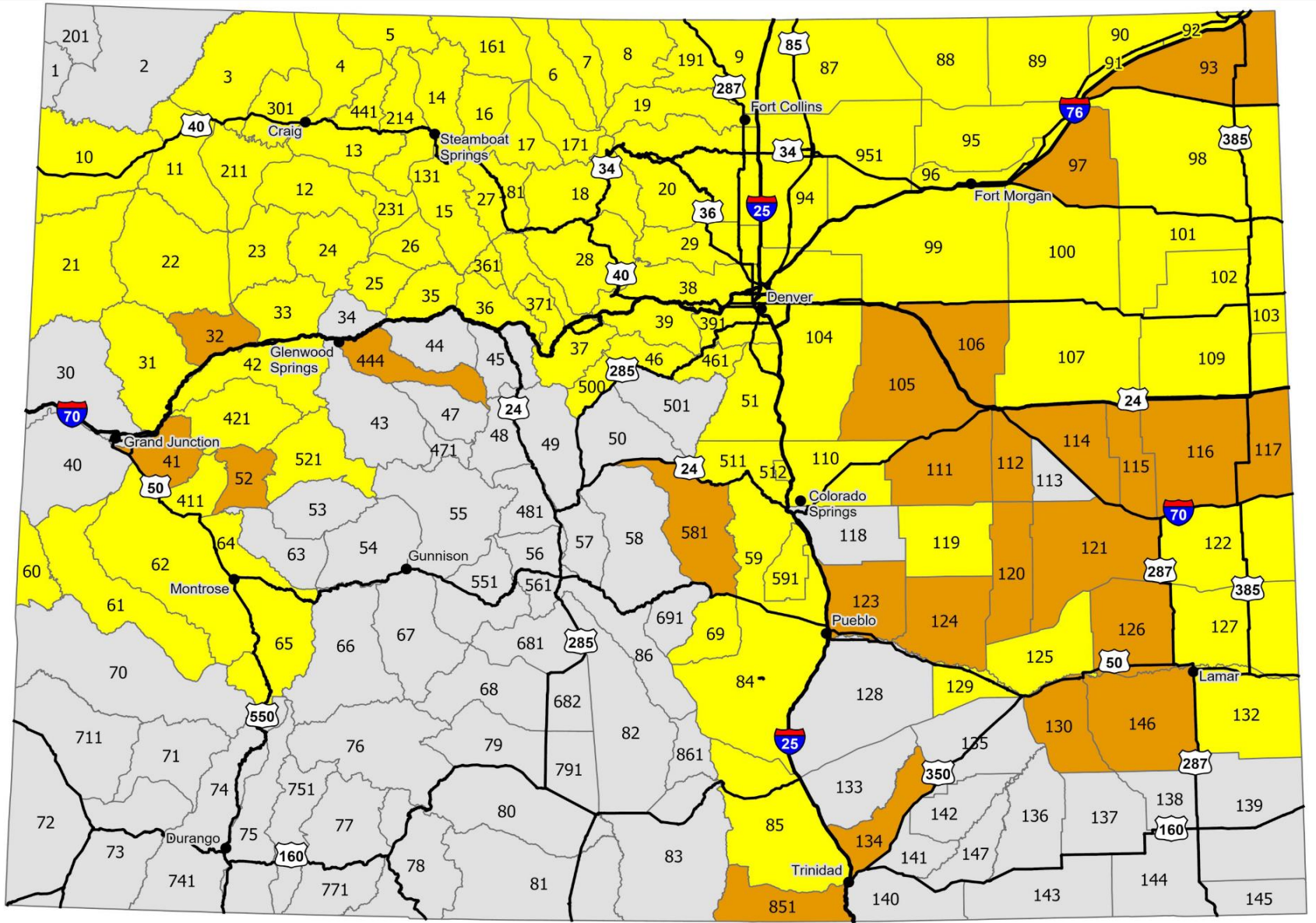
Year of Mandatory Testing



Monitoring and Surveillance Findings



LIVE LIFE
OUTSIDE



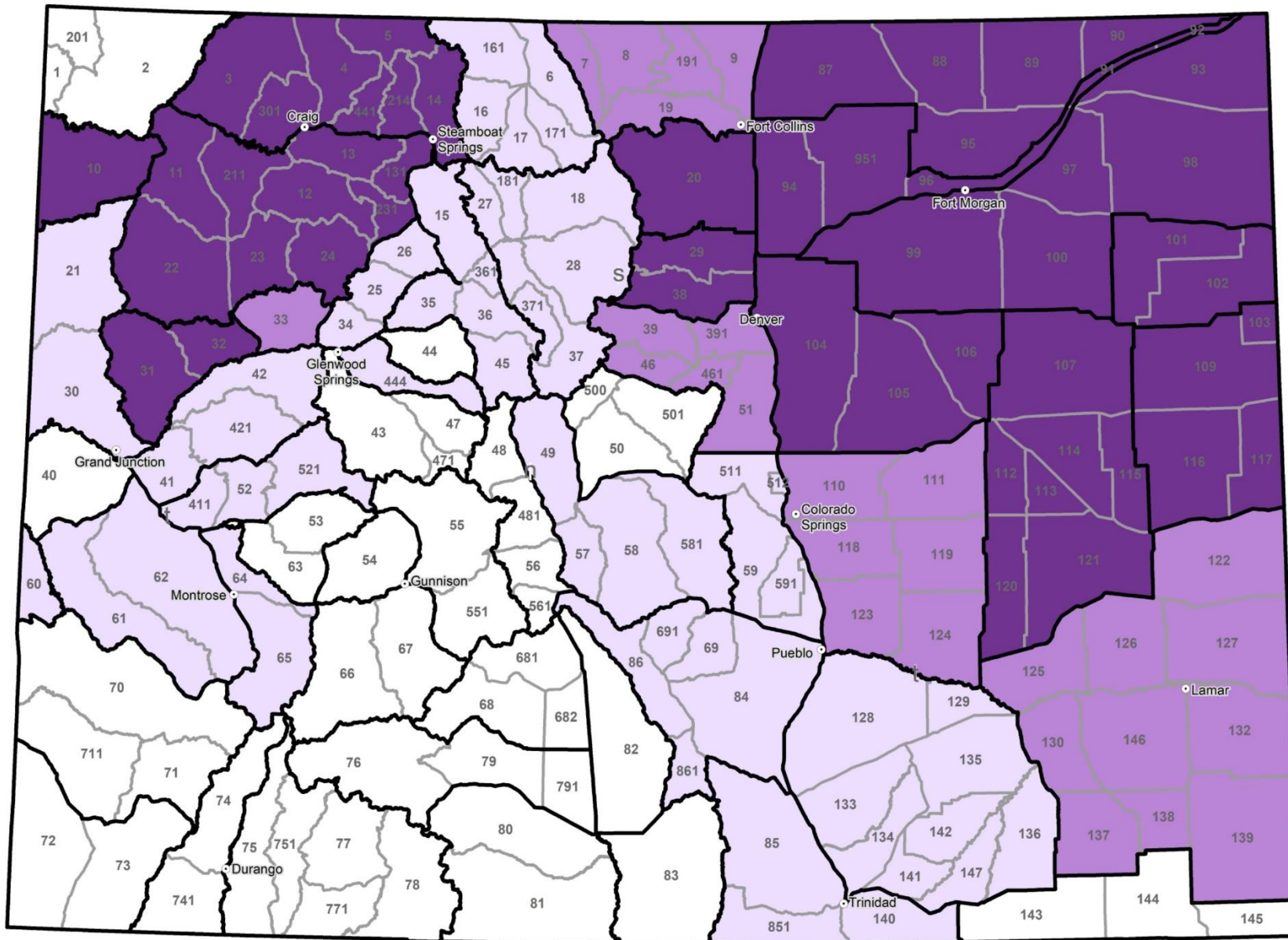
Known CWD positive GMUs as of 1/28/2020

** Once CWD has been detected in a single GMU within a DAU, the entire DAU is considered positive based on best available information on CWD epidemiology and deer movement. There are likely additional positive GMUs that have not yet been detected, particularly in units neighboring those already known to be positive. As mandatory testing moves around the state, CPW will gain better confidence on CWD distribution in Colorado.

GMUs with CWD Detections in Deer and Elk

- Detected Prior to 2019
- Detected in 2019
- No Current Detections





Detected CWD in Harvested Adult Deer Bucks

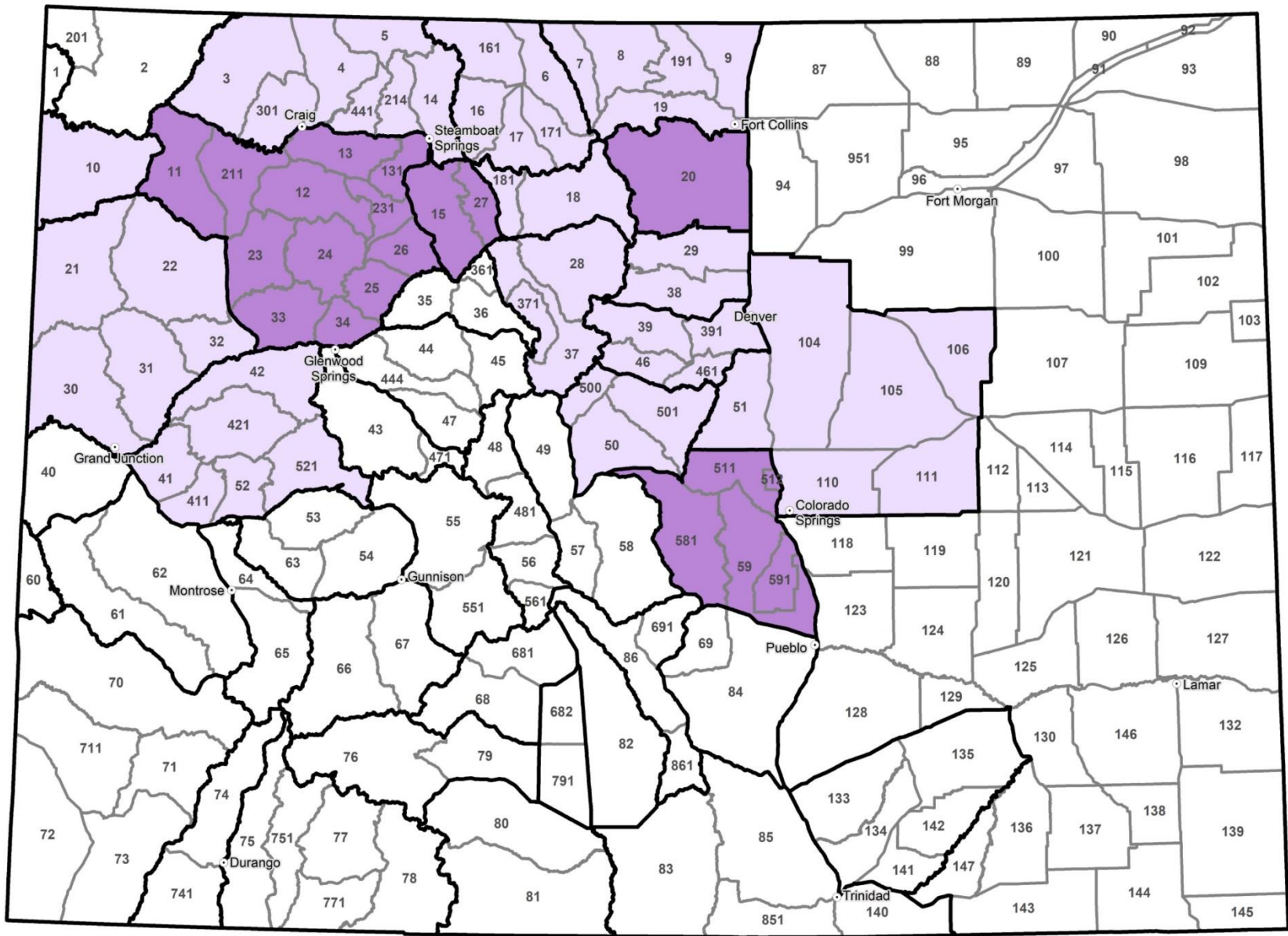
February 2020

**Estimated CWD Infection Rates
for Harvest Data in Colorado
2015 - 2020**



- -
 -
- -
 -

GMUs Not Detected Detected 5-10%
 Deer DAUs Detected less than 5% Detected greater than 10%



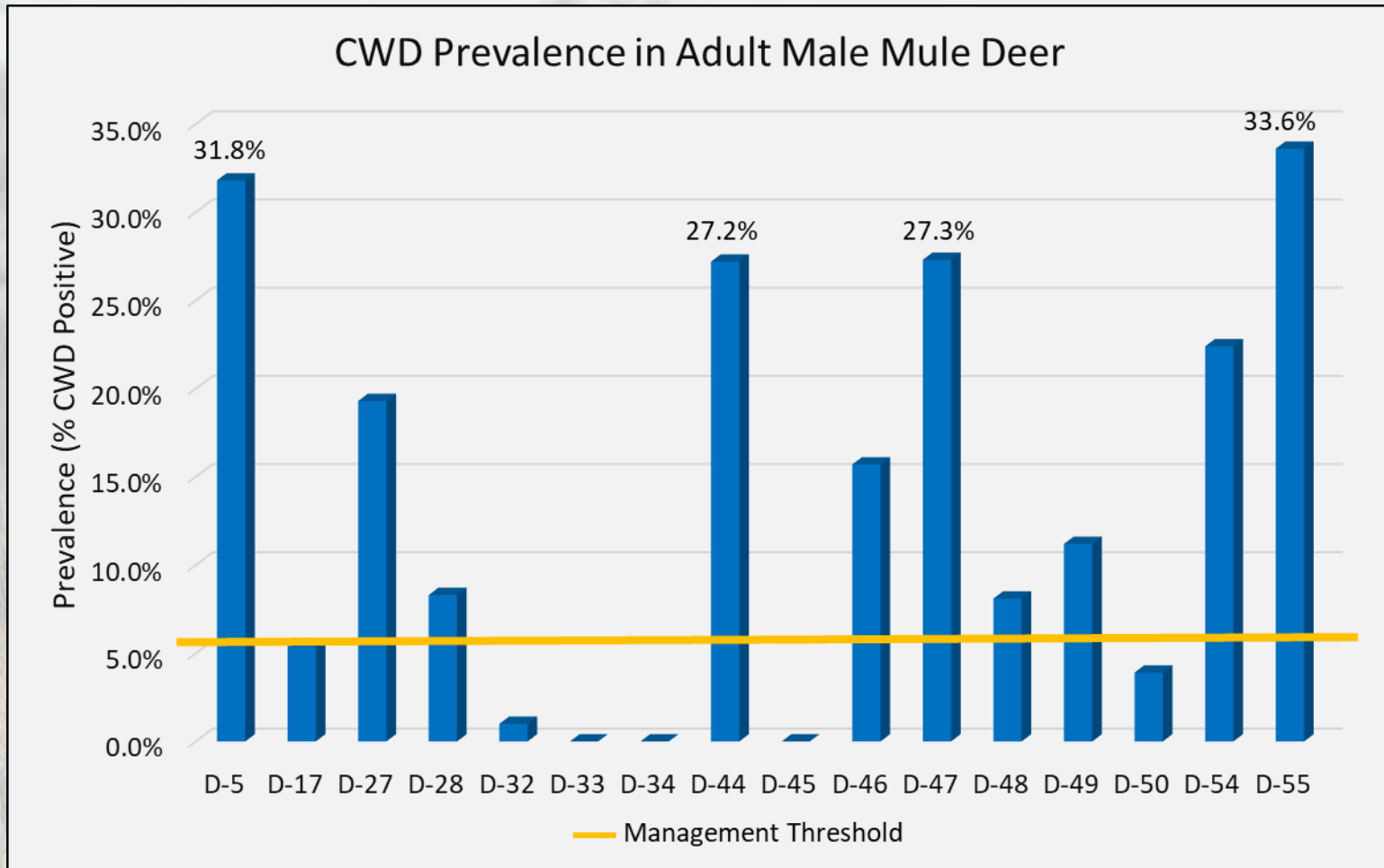
Detected CWD in Harvested Adult Elk
January 2020

Estimated CWD Infection Rates
for Harvest Data for Colorado
2015 - 2020

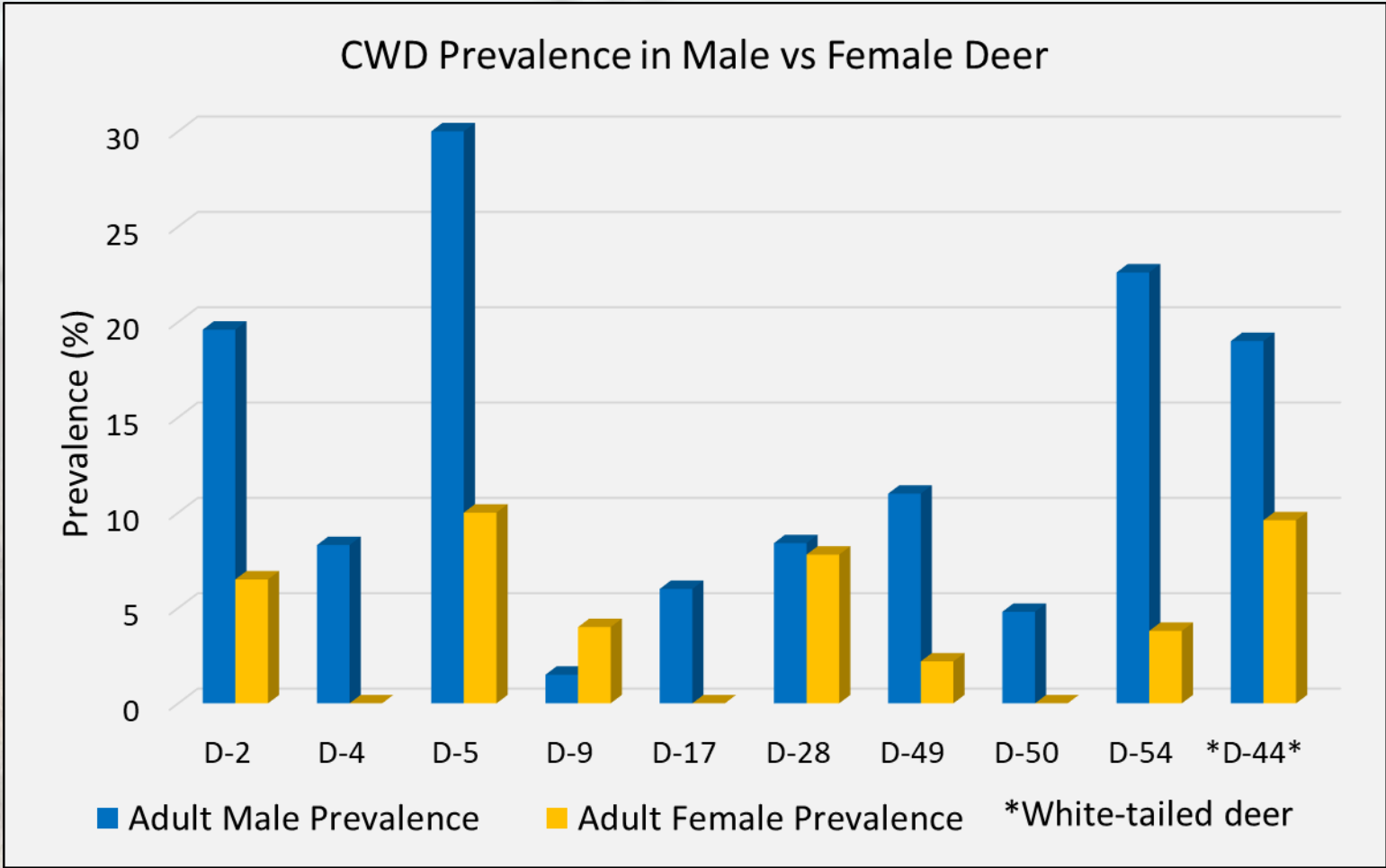


- GMUs
- Elk DAUs
- Not Detected
- Detected less than 5%
- Detected 5-10%
- Detected greater than 10%

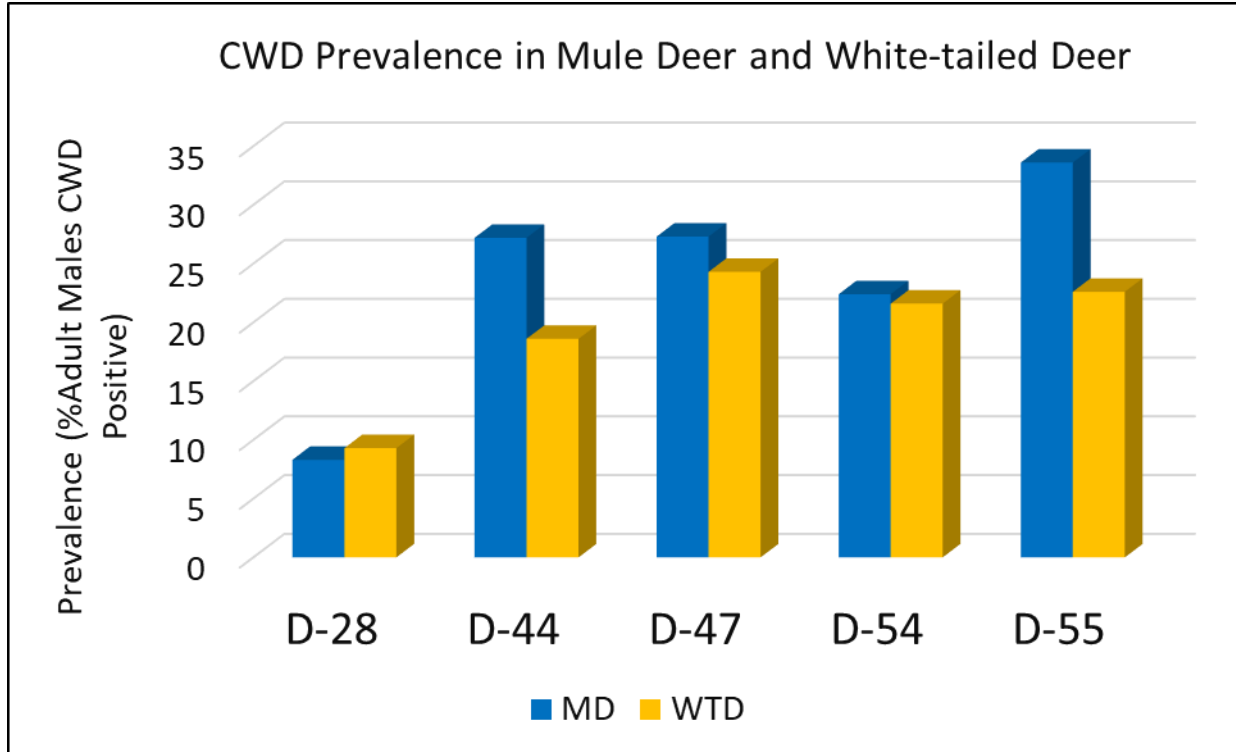
Prevalence by DAU



Prevalence by Sex

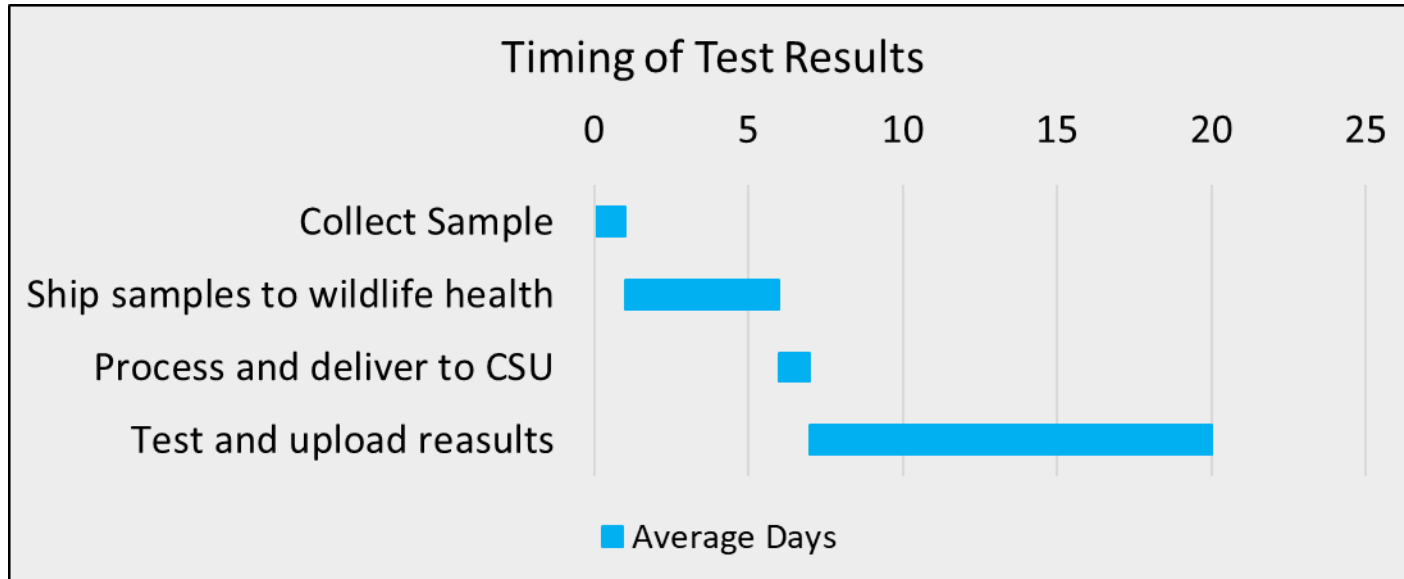


Mule Deer vs White-tailed Deer Prevalence



LIVE LIFE
OUTSIDE

CWD Testing



1. Samples collected in the field, at area offices
2. Samples batched and sent to CPW wildlife health
3. Samples processed by wildlife health and brought to CSU diagnostic laboratory
4. Samples tested by CSU and results uploaded to database



CWD Research Efforts

Current Research Efforts

- Assessing harvest management influences on CWD trends in the West
- Evaluation of hunting pressure and prion infection risk in CO mule deer
- Mountain lion susceptibility to CWD
- Human Dimensions research

Future Research Plans

- Evaluate existing data on doe prevalence and impacts to survival
- Develop prospective management experiments designed for robust analysis of efficacy



LIVE LIFE
OUTSIDE

Management Summary



LIVE LIFE
OUTSIDE



Colorado Chronic Wasting Disease Response Plan



December 2018

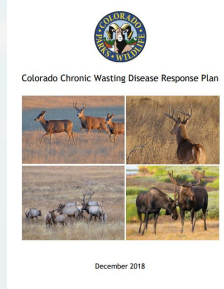
Contents

I. Executive Summary.....	4
II. Definitions.....	6
III. Introduction.....	9
A. History of CWD in Colorado.....	9
B. Statement of Purpose.....	12
C. CWD Advisory Group.....	12
D. Implementation.....	13
IV. Management Objectives.....	14
V. Surveillance and Monitoring Programs.....	14
A. Surveillance.....	14
B. Monitoring and Testing Efficacy of Management Actions.....	14
VI. CWD Prevalence Threshold for Compulsory Disease Management.....	18
VII. Herd Management Plans and WAFWA Guidelines.....	22
VIII. Management Actions and Recommendations to Control CWD Prevalence.....	23
A. Reduce Population or Density.....	23
B. Reduce Male/Female Ratio.....	24
C. Change Age Structure.....	25
D. Maximize Ability to Remove Diseased Animals at the Smallest Scales Possible (hot spots).....	26
E. Remove Motivations that Cause Animals to Congregate.....	27
F. Minimize Prion Point Sources.....	27
G. Incorporation of CWD Management Actions and Prevalence Threshold into Herd Management Plans.....	28
IX. Monitoring Results, Reassessment, and Adaptive Management Actions.....	29
X. Reporting Timeline, Future Plan Expansions, and Future Needs.....	30
XI. Education and Communications Strategy.....	31
XII. Acknowledgements.....	32
XIII. References Cited.....	33
XIV. Appendices.....	34



LIVE LIFE
OUTSIDE

CWD Prevalence Threshold for Compulsory Disease Management



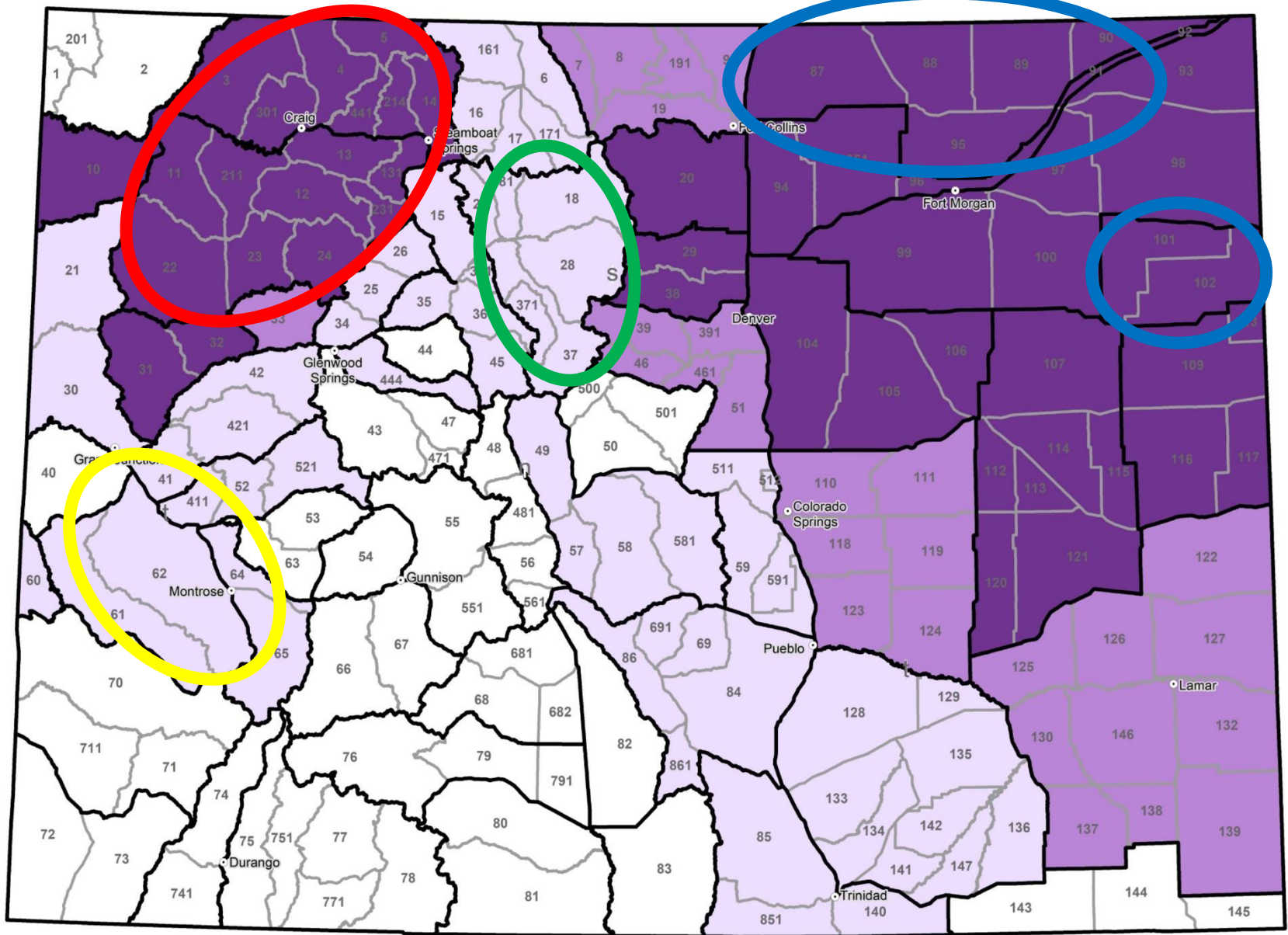
Above and Below the 5% Prevalence Threshold

Establishment of a 5% prevalence threshold for compulsory intervention creates 2 management scenarios:

1. If the CWD prevalence estimate for adult male deer in a herd is greater than or equal to 5%, management actions will be taken to reduce prevalence until it falls below the 5% threshold.
2. If the CWD prevalence estimate for adult male deer in a herd is less than 5%, management actions are recommended to maintain prevalence below the 5% threshold.



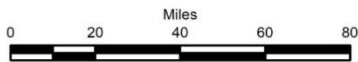
LIVE LIFE
OUTSIDE



Detected CWD in Harvested Adult Deer Bucks

February 2020

**Estimated CWD Infection Rates
for Harvest Data in Colorado
2015 - 2020**



- GMUs
 - Not Detected
 - Detected 5-10%
- Deer DAUs
 - Detected less than 5%
 - Detected greater than 10%